Safe at Home

How one nursing home reduced staff injuries to near zero

oes "zero lift" mean success or failure? That depends on who you are. If you're a weight lifter, it means you failed to cleanly jerk a 200-pound bar over your head. Not good. But, if you're an administrator in a long term care facility, you've attained an admirable goal.

In long term care, a "zero lift" philosophy is one in which caregivers use lifting devices to transfer residents from one place to another, such as from the bed to a chair. This minimizes the risk of back and shoulder injuries to caregivers because they are not using their bodies as derricks.

At Bessie Burton Sullivan Skilled Nursing Residence in Seattle, "zero lift" is one element of a safety program that is serious about ergonomics: It is defined as matching jobs or workplaces to the capabilities and limitations of the human body. Carmen Steiner, executive administrator of the 139-bed facility owned by Seattle University, knows there is a payoff to the facility's safety efforts.



Nationwide, nursing homes and personal-care facilities have one of the highest rates of nonfatal injury or illness cases—14.2 injuries and illnesses per 100 full-time workers, according to the Occupational Safety and Health Administration (OSHA). This is more than double the incident rate of 6.7 for industry as a whole.

OSHA research shows that nursing-home workers suffer most injuries (51.2 percent) when handling residents. And back injuries account for 42 percent of all injuries in nursing homes, compared with 27 percent of all injuries in the private sector.



There are no government-mandated ergonomics standards at the national level for nursing homes. However, in the state of Washington, the Department of Labor and Industries (L&I) adopted an ergonomics standard designed to reduce work-related musculoskeletal injuries such as back strain, tendinitis and carpal tunnel syndrome. The first of these requirements began in July; the others will be phased in over the next five years.

New equipment vs. new staff

Ergonomics safety at Steiner's facility is driven by the need to retain a healthy staff. With the shortage of qualified workers at a crisis point, there's no room for worker injuries that can cause time lost from jobs or, worse, turnover

of staff. "With the tight labor market we're in, you don't know if you can replace them," Steiner says of workers injured on the job. Her facility even uses its "zero lift" workplace environment as a recruiting tool.

Steiner says she's aware that ergonomic changes can be a costly venture for many facilities, "but injuries are a costly venture. I don't think we can afford not to do it." In Washington, a back injury costs an average of \$6,103 in medical and wage-replacement expenses for time-loss claims.

After four pieces of lift equipment were purchased about four years ago for \$22,000, "we saw a payback in the first year." She says the reduction in the number of time-loss claims from musculoskeletal injuries such as back



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sprains and strains was "remarkable." In 1997, Bessie Burton had 73 days of time loss for transfer-related back injuries. In 1998, it fell sharply, to 48 days. In 1999, it was down to two days and in 2000, seven days.

Steve Browne, a physical-therapist assistant at Bessie Burton Sullivan and chairman of the safety committee, says the initial purchase of lift equipment—from full-body lifts for immobile residents to "standing lifts" for residents who are partially weight-bearing—met with resistance from nursing assistants. He said they felt that use of the equipment would take too much time. As a result, nursing assistants were reluctant to use it.

However, after each staff member was individually trained on the equipment and shown that it could decrease the time required to move a resident, the lift equipment began to be used regularly. Now it's standard operating procedure, "and we have almost no claims now from lifting incidents," Browne says. He notes that residents' safety increases, too, because their transfer from one location to another is not dependent upon the strength of someone's back but, rather, use of sturdy, protective equipment.

Barbara Silverstein, research director for L&I's Safety and Health Assessment and Research for Prevention program, says Bessie Burton Sullivan's embracing of the "zero lift" philosophy is a good example for the long term care industry. "We know from looking at injury and illness statistics that this industry has the highest rate for back injuries," she says. "And so the probability is high ... that you will have an injury at some point. It doesn't have to be that way. This really can be an injury-free environment for both workers and residents."

Silverstein noted, too, that the viability of a nursing-home business could depend on preventing worker injuries. "The basic bottom line of whether they continue to operate successfully is whether their caregivers are giving adequate care," she said. "And if caregivers are in pain, they may not be providing adequate care."

Washington's ergonomics rule





- A workplace safety and health rule to protect employees from work-related musculoskeletal disorders such as back strain, tendinitis and carpal tunnel syndrome.
- The rule initially focuses on large employers in the industries with the highest risk of injuries—for example, nursing homes, sawmills and several of the building trades.
- Employers must determine whether they have any "caution zone jobs" that include physical risk factors described in the rule. Businesses with these jobs must analyze them further and meet certain employee-education requirements.
- If exposure to risk—frequent lifting or repetitive motion, for example—reaches a hazardous level, the employer must reduce the exposure to a non-hazardous level or to the extent feasible.
- The rule phases in over five years, beginning July 1, 2002. The amount of time employers have to comply depends on the size of the business and the type of industry. Enforcement for each phase will be delayed two years.
- Educational materials, technical assistance and model programs to help employers implement the rule are available from the Department of Labor and Industries. For more information, contact an L&I office or visit www.lni.wa.gov/wisha/ergo.
- More information about Bessie Burton Sullivan's ergonomics and safety program is available at www.lni.wa.gov/wisha/ergo/demofnl/nursing-fnl.pdf.

Not just backs get injured

Since its success with the "zero lift" policy, Bessie Burton Sullivan has looked at another potentially injury-inducing task. Medication dispensing can cause injuries, too—specifically to the thumbs of staff members who had to push hundreds of pills out of foil-encased pouches. The problem was solved with the purchase of new plastic pill cassettes with easy-to-open tab lids.

The facility also purchased smaller and lighter medicine carts that most staff members found easier to push. An added benefit was that the new carts meant less congestion in the hallways and a lower likelihood of related injuries, such as a large, heavy cart inadvertently running over the toes of a resident.

In other areas, Bessie Burton is busy trying to provide workplace and ergonomic safety for staff members and residents. Among the steps taken: scheduling changes were instituted to deal with fatigue, non-skid rubber mats were installed in some areas, safety shoes were purchased for workers exposed to potentially slippery areas, new lightweight PVC linen carts were added to reduce lifting and bending, and new user-friendly food-tray carts were added. Many of the steps taken to reduce injuries and save money have gone beyond the requirements of the Washington ergonomics rule.

Steiner says her philosophy for her facility is "to be the best in the state," and, she says, that includes ergonomic safety.

Reference

U.S. Department of Labor, Occupational Safety & Health Administration Web site, www.osha-slc.gov/ SLTC/nursinghome/index.html